OFFICE OF CONGRESSMAN EARL BLUMENAUER
APPROPRIATIONS REQUEST FORM
FISCAL YEAR 2011

Instructions

1. Please complete the entire form. **All fields are required.**
2. Please do not **bold**, underline, or *italicize* responses.
3. Request forms must be submitted as a Word document.
4. All completed request forms and any supplemental materials must be submitted via email to: **Appropriations.Blumenauer@mail.house.gov**
5. Please do not send more than one request per email.
6. All completed request forms must be submitted no later than **Friday, February 26, 2010**.
7. If you do not receive an email confirming receipt of your request within 48 hours of submission, please contact Stephanie Cappa in Congressman Blumenauer's Washington, D.C. office at 202-225-4811.

PLEASE NOTE: All appropriations requests submitted to Congressman Blumenauer's office will be made public on his website, as required by the House Committee on Appropriations.

Project Details

1. Project title:
Feasibility Study and Design of a South Waterfront District Energy System

2. Organization name and address (the recipient of the funds)**:**
Oregon Health and Science University (OHSU)
3181 SW Sam Jackson Park Rd. PP22E
Portland, OR 97239

3. Contact information

a. **Project's primary contact:** Brian Newman, Director, Campus Planning & Development
b. **Daytime telephone number/ mobile phone number:** 503-346-0005
c. **Email Address:** newmanb@ohsu.edu

a. **Project's secondary contact:** Lynne Boyle, Director of Federal Relations
b. **Daytime telephone number/ mobile phone number:** 202-256-5070
c. **Email Address:** boylel@ohsu.edu

d. **Project location (if different than organization's address):**
Study Area:
SW Moody Ave between SW Sheridan Street and SW Bancroft Street
Portland, OR 97239

4. Please describe the requesting organization's main activities.
Oregon Health & Science University is the state's only academic health center. OHSU's serves 210,000 patients annually, and is a conduit for learning for more than 4,100 students and trainees. OHSU is the source of more than 200 community outreach programs that bring health and education services to every county in the state.

A leader in research, OHSU earned $307.1 million in research funding in FY 2009 with more than 4,100 research projects currently under way. OHSU serves as a catalyst for the region's bioscience industry, averaging one new breakthrough every three days.

5. Is this organization a public, private non-profit, or private for-profit entity?
OHSU is a public entity.

6. From what federal agency and account are you requesting funds (Please be specific –e.g., Department of Housing and Urban Development, Economic Development Initiatives account)?
U.S. Department of Energy: Energy Efficiency and Renewable Energy (EERE)

7. Briefly describe the activity or project for which funding is requested (no more than 500 words)**.**
OHSU, in partnership with the Portland Development Commission (PDC) and the Portland Oregon Sustainability Institute (PoSI), is engaged in high-level planning for a district energy system that will serve OHSU's new Schnitzer Campus and adjacent properties in Portland's South Waterfront District. OHSU's master plan anticipates a future medical and life sciences campus with over two million square feet of new academic and research buildings, including its first building, OUS/OHSU Life Science Collaborative Complex, set to break ground in 2011. Adjacent property owners are planning several million additional square feet of commercial development over the next two decades. As transportation improvements to South Waterfront streets (due to Milwaukie Light Rail extension) are scheduled to occur in Spring 2011, now is the most opportune time to plan infrastructure and sustainability improvements that will serve development in the entire district and can be phased with new projects as they come on line.

This request will fund feasibility study and design of a district energy system to serve the South Waterfront District. District energy systems generate their own electricity to produce steam, hot water or chilled water at a central plant. The steam or water is then piped underground to individual buildings for space heating, domestic hot water heating and air conditioning. As a result, individual buildings served by a district energy system don't need their own boilers or furnaces, chillers or air conditioners. Aggregating the thermal requirements of different buildings allow district energy systems to enjoy economies of scale and operational benefits such as using industrial grade equipment, alternative fuel technologies that would otherwise not be economically or technically feasible for individual buildings, and reduced capital cost to individual building development. District energy systems improve energy efficiency, enhance environmental protection through reduced greenhouse gases, and are more reliable providers of energy.

The most significant obstacle to implementing a district energy system that serves multiple property owners is the amount of upfront planning, coordination and design that needs to happen before the development it will serve is under construction. Also, determining the distribution

network that will serve the development is key since most connections will be built below public streets and right-of-ways.

This district energy feasibility study and design will accomplish the following tasks:

- Calculate a baseline energy load to heat, cool and power the existing buildings and facilities in the district.
- Project future energy loads based on building in the planning pipeline, adopted master plans and the zoning capacity of the district.
- Evaluate multiple energy generation methods that are sized appropriately for the district, can be scaled with development, and are financially feasible.
- Determine the financial feasibility and environmental benefits (e.g. carbon reduction) of the various district energy systems under consideration.
- Develop a financing and governance strategy for implementing a district energy system.
- Complete a site assessment for the energy plant and design the distribution network to serve all properties in the district.
- Complete a capital and phasing plans for the first phase of the project.

8. What is the purpose of the project? Why is it a valuable use of taxpayer funds? How will the project support efforts to improve the economy and create jobs in Oregon?

The purpose of the project is to assess the feasibility and to design a district energy system in Portland's South Waterfront district. The purpose of a district energy system is to provide energy on a neighborhood scale that reduces greenhouse gases, is cost effective and much more efficient than long-distance energy distribution. Energy conservation and protection of the environment are important public policy goals. For example, the U.S. Environmental Protection Agency has policies to promote combined energy and power programs, which is what district energy represents. Federal funding of this study is a valuable use of taxpayer funds as district energy projects are cost effective and environmentally friendly energy systems.

If the feasibility study determines district energy is a viable solution for the South Waterfront, construction of and capital investment in a district energy system in the South Waterfront district will provide good paying construction, design and engineering jobs. With a low range estimate of $15 million to fund the capital cost of a district energy system, the project would create 315 jobs, of which 107 jobs would be direct construction jobs in Oregon.

9. Has this project received federal appropriations funding in past fiscal years?

No.

9a. If yes, please provide the fiscal year, Department, Account, and funding amount of any previous funding.

n/a

<u>Funding Details</u>

10. Amount requested for this project: $540,000

11. Breakdown/budget of the amount you are requesting for this project (e.g., salary $40,000; computer $3,000):
100% of the budget is for consultant services for planning and engineering work.

12. What is the <u>total</u> cost of the project?
$640,000 for Planning: Project partners have already dedicated $100,000 for a high-level scan on the applicability of district energy. This request is for $540,000 to fund a feasibility study and design.

$15-30 million in Capital Construction: The range of costs for capital construction of the district energy plant and distribution system are $15-$30 million.

13. Is this project scalable (i.e., If partial funding is awarded, will the organization still be able to use the funds in FY 2011?)?
The feasibility study and design have been consciously broken out from the capital budget in order to scale the project. Also, the capital portion of the project can be phased over time with development of the district.

14. What other funding sources (local, regional, state) are contributing to this project or activity? (Please be specific about funding sources and funding amounts)
OHSU, the Portland Development Commission (PDC) and the Portland Oregon Sustainability Institute (PoSI) are currently engaged in high level planning for a district energy system that serves Portland's South Waterfront District. The approximate cost of the high level planning, a critical analysis necessary for the feasibility study is $100,000. OHSU is contributing $50,000 and the PDC is contributing $50,000. The analysis will be completed in the Fall of 2010.

15. Please list public or private organizations that have supported/endorsed this project.
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Chairman, OHSU Foundation Board of Directors
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OHSU is also working closely with the Portland Development Commission (PDC) and the Portland Oregon Sustainability Institute (PoSI).

Please return this form no later than Friday, February 26, 2010 via email to:

Appropriations.Blumenauer@mail.house.gov

Washington, D.C. Appropriations Contact for Rep. Earl Blumenauer: Stephanie Cappa, 202-225-4811, Stephanie.Cappa@mail.house.gov

Oregon Appropriations Contact for Rep. Earl Blumenauer: Sarah Masterson, 503-231-2300, Sarah.Masterson@mail.house.gov